

three inches = one foot

6"

one and one half inches = one foot

6"

1

one inch = one foot

6"

2

three quarters inch = one foot

6"

0

2

one half inch = one foot

6"

0

4

one half inch = one foot

6"

0

4

one quarter inch = one foot

6"

0

4

8

one eighth inch = one foot

6"

0

4

8

16

### SPRINKLER NOTES

1. SCOPE OF WORK: DEMOLISH EXISTING SPRINKLER SYSTEM IN THE AREA OF WORK. PROVIDE COMPLETE, HYDRAULICALLY CALCULATED AUTOMATIC SPRINKLER SYSTEMS THROUGHOUT THE AREA OF RENOVATIONS (WARD 4E OF THE VA MEDICAL CENTER). INSTALL FIRE SUPPRESSION SPRINKLER SYSTEMS AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH NFPA 13 AND VA FIRE PROTECTION STANDARDS. SPRINKLERS SHOWN ON DRAWINGS ARE FOR DESIGN INTENT ONLY. PROVIDE HYDRAULIC CALCULATIONS FOR THE NEW SYSTEM. PROVIDE ALL EQUIPMENT, LABOR AND MATERIAL FOR AN ACCEPTED AUTOMATIC SPRINKLER AND STANDPIPE SYSTEM, INCLUDING WATER FLOW ALARM SWITCHES, VALVE SUPERVISORY SWITCHES, CHECK VALVES, CONTROL VALVES, PIPING, HANGERS, SPRINKLER, AND ALL ASSOCIATED EQUIPMENT. IN AREAS WITH CEILINGS, ALL SPRINKLER PIPE SHALL BE CONCEALED ABOVE THE CEILINGS. BUILDING SHALL BE OCCUPIED DURING RENOVATIONS.
2. ANY INFORMATION CONFLICTS BETWEEN THE SPECIFICATIONS AND DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION. THE CONTRACTOR(S) SHALL NOT PROCEED WITH ANY WORK, EXCEPT AT THEIR OWN RISK, UNTIL CLARIFICATIONS OF THE CONFLICTS ARE ISSUED TO THE CONTRACTOR(S) BY THE ENGINEER.
3. THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS ON THE DRAWINGS PRIOR TO THE EXECUTION OF THIS CONTRACT. LOCATION AND SIZES OF PIPING AND LIGHTING FIXTURES ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL SYSTEM COMPONENTS. CONTRACTOR SHALL REPORT ANY DISCREPANCIES WITH THESE DRAWINGS TO THE ENGINEER IMMEDIATELY.
4. ALL AREAS ARE LIGHT HAZARD UNLESS NOTED ON THE DRAWINGS..
5. CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING ALL CONFLICTS WITH LIGHTING FIXTURES, DIFFUSERS, GRILLS, DUCTS, STRUCTURAL MEMBERS, PIPES AND OTHER OBSTRUCTIONS ENCOUNTERED.
6. ALL FIRE PROTECTION SYSTEM CONTROL VALVES SHALL BE EQUIPPED WITH APPROVED VALVE SUPERVISORY SWITCHES. ALL INSPECTOR'S TEST, DRAIN AND CONTROL VALVES SHALL BE PROVIDED WITH VALVE TAMPER COVERS (LOCKOUT COVER) TO PREVENT TAMPERING. ALL LOCKS SHALL BE KEYED IDENTICAL TO OWNER'S REQUIREMENTS.
7. CONTRACTOR SHALL MAINTAIN AS MUCH HEAD ROOM CLEARANCE AS PRACTICAL BETWEEN BOTTOM OF SPRINKLER PIPE, FITTINGS, VALVES, AND SPRINKLER HEADS WITH THE FINISHED FLOOR IN ALL AREAS OF EXPOSED PIPE. IN NO CASE PROVIDE LESS THAN 7'-0" [2.1M] OF HEAD ROOM CLEARANCE.
8. PROVIDE HEAD GUARDS (CAGES) ON SPRINKLERS (ANY PART OF THE SPRINKLER) THAT IS INSTALLED AT OR BELOW 7'-0" [2.1M] AND IN AREAS SUBJECT TO PHYSICAL DAMAGE.
9. ALL AUXILIARY VALVES AND LOW POINT VALVES SHALL BE BALL VALVES.
10. THE TERM "PROVIDE" SHALL MEAN THE CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT FOR A COMPLETE AND OPERATIONAL SYSTEM.
11. THE TERM "REMOVE" SHALL MEAN THE CONTRACTOR SHALL DISCONNECT AND CLEAR FROM SITE.
12. ALL EQUIPMENT SHALL BE TESTED/APPROVED BY A NATIONAL TESTING LABORATORY AND INSTALLED PER THE LISTING AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. SPRINKLERS MUST BE FM APPROVED.
13. PIPING: ALL PIPE 2" [50MM] AND SMALLER SHALL BE STEEL PIPE SCHEDULE 40 WITH THREADED FITTINGS. ALL PIPE 2.5" [63MM] AND LARGER SHALL BE STEEL PIPE SCHEDULE 40 OR SCHEDULE 10.
14. HANGERS: INSTALL HANGERS PER NFPA 13.
15. SPRINKLERS:

15.1. SUSPENDED CEILINGS: RECESSED PENDENT, UL APPROVED, FM APPROVED, QUICK RESPONSE. WHITE-PLATED WITH ESCUTCHEON, INSTALL CENTER OF TILE NO CLOSER THAN 12-INCHES FROM SUSPENDED CEILING SUPPORTS.

15.2. EXPOSED CONSTRUCTION: UPRIGHT TYPE, UL APPROVED, FM APPROVED, QUICK RESPONSE, BRASS FINISH.
16. REFER TO ARCHITECTURAL DRAWINGS FOR PHASING NOTES.
17. REFLECTED CEILING PLAN SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES, CEILING HEIGHTS, AND FIXTURE LOCATIONS.
18. SMOKE COMPARTMENTS SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF SMOKE AND FIRE BARRIER WALLS. FIRESTOP ALL PENETRATIONS IN RATED WALLS IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
19. CERTAIN SPRINKLER MAINS AND BRANCHLINES LOCATED WITHIN THE AREA OF WORK SERVE SPRINKLERS LOCATED OUTSIDE THE AREA OF WORK. IT IS CRITICAL THAT THE CONTRACTOR MAINTAIN SERVICE TO SPRINKLERS LOCATED OUTSIDE THE AREA OF WORK. COMPLY WITH NFPA AND VAMC REQUIREMENTS AND PROCEDURES FOR SYSTEM IMPAIRMENTS. SUBMIT A WRITTEN IMPAIRMENT PLAN/SCHEDULE TO THE COTR FOR APPROVAL PRIOR TO STARTING WORK. NOTIFY THE VAMC AND COTR AT LEAST 48 HOURS PRIOR TO ANY PLANNED SYSTEM SHUT-DOWN.

### ABBREVIATIONS

A AMP

ABV ABOVE

A/E ARCHITECT/ENGINEER (OF RECORD)

AFF ABOVE FINISHED FLOOR

ANSI AMERICAN NATIONAL STANDARDS INSTITUTE

A/S AUTOMATIC SPRINKLER

AWG AMERICAN WIRE GAUGE

BLDG BUILDING

BOB BOTTOM OF BEAM

BOJ BOTTOM OF JOIST

C CEILING

CLO CLOSET

CMU CONCRETE MASONRY UNIT

COM COMMUNICATIONS

CONT CONTINUED

CORR CORRIDOR

DS DRY SPRINKLER

EC EXTENDED COVERAGE SPRINKLER

ELEC ELECTRIC

EOLR END OF LINE RESISTOR

EXIST EXISTING

FACP FIRE ALARM CONTROL PANEL

FDC FIRE DEPARTMENT CONNECTION

GPM GALLONS PER MINUTE

IN INCH

JC JANITOR'S CLOSET

LAT LAY-IN ACOUSTICAL TILE

MACH MACHINE

MI MINERAL INSULATED

MNS MASS NOTIFICATION SYSTEM

MPS MANUAL PULL STATION

MR MACHINE ROOM

NAC NOTIFICATION APPLIANCE CIRCUIT

NFPA NATIONAL FIRE PROTECTION ASSOCIATION

NO NUMBER

NOS NUMBERS

NTS NOT TO SCALE

OPG OPENING

P PHASE

PS PIPE SHAFT

PSI POUNDS PER SQUARE INCH

QR QUICK RESPONSE

RM ROOM

RCP REFLECTED CEILING PLAN

SPKLR SPRINKLER

SSU STANDARD UPRIGHT SPRAY

STDP STANDPIPE

SF SQUARE FOOT

SPD SURGE PROTECTION DEVICE

STO STORAGE

TC TERMINAL CABINET

TOJ TOP OF JOIST

UNO UNLESS NOTED OTHERWISE

VAC VOLTS ALTERNATING CURRENT

WP WEATHERPROOF

W/ WITH

### SPRINKLER LEGEND

- FCA FLOOR CONTROL ASSEMBLY, SEE DETAIL
- HVC HOSE VALVE CABINET, RECESSED
- RECESSED PENDENT SPRINKLER, QUICK RESPONSE
- UPRIGHT SPRINKLER, QUICK RESPONSE
- ⊗ UPRIGHT SPRINKLER, QUICK RESPONSE, WITH GUARD
- ⊗⊗ PENDENT SPRINKLER, STANDARD RESPONSE, WITH GUARD
- ⊗ SIDEWALL SPRINKLER, STANDARD RESPONSE, WITH GUARD
- ⊔ ELBOW (FACING AWAY FROM VIEWER)
- ⋄ CONTINUATION MARK
- ⦿ HOSE VALVE
- ⊗ VALVE, OUTSIDE STEM & YOKE
- ⊗ VALVE, INDICATING BUTTERFLY
- W WATER FLOW ALARM SWITCH
- S VALVE TAMPER SUPERVISORY SWITCH
- FIRE PUMP
- SPRINKLER PIPE
- ⊗ START OF WORK
- ⬡# KEY NOTE
- ⬡CODE HYDRAULIC NODE
- OH-1 ORDINARY HAZARD GROUP 1
- OH-2 ORDINARY HAZARD GROUP 2

DASHED LINES INDICATE EXISTING PIPE/DEVICES

### FIRE PUMP TEST DATA

TEST DATE: MARCH 06, 2010  
CONDUCTED BY: JUDD FIRE PROTECTION, LLC

CHURN PRESSURE: 125 PSI  
FLOW AT 100%: 500 GPM  
PRESSURE AT 100% FLOW: 103 PSI

CONSTRUCTION DOCUMENTS 100% - FOR BID	06/12/2012
CONSTRUCTION DOCUMENTS 100% SUBMITTAL	06/22/2011
CONSTRUCTION DOCUMENTS 95% SUBMITTAL	02/01/2011
DESIGN DEVELOPMENT 50% SUBMITTAL	06/21/2010
SCHEMATIC DESIGN 15% SUBMITTAL	05/03/2010
Revisions:	Date

VA FORM 08-6231, OCT 1978

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CA PROJECT 00938.02

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Approved: Project Director

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Date
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Checked
FAE
Drawn
PAM

Project Number
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Building Number
E
Drawing Number
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